## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013978 Address: 333 Burma Road **Date Inspected:** 11-May-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Chen Xi. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

Bay 1: CB15:

This QA Inspector observed that no significant work was being performed on this CB at the time when this QA was present.

Bay 8: CB17:

This QA Inspector observed that no significant work was being performed on this CB at the time when this QA was present.

Outside Yard:

CB12 & CB16:

This QA Inspector observed that no significant work was being performed on the above mentioned CB's at the time when this QA was present.

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

#### CB14:

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) of weld joints SP202-014-007 to 017. Welder is identified as 051359. ZPMC QC is identified as Wang Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2113-Padeye.

Repair welding of weld joint nos: CB202A-014 – 005. Welder was identified as 051359. Welding process was identified as SMAW. ZPMC QC is identified as Wang Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-2G(2F)-FCM-Repair (welding repair report (WRR) no: B-WR12746 Rev-0).

#### CB11:

During random inprocess visual inspection of this Cross Beam, this QA Inspector observed ZPMC personnel doing arc gouging of the below mentioned fillet welds:

- 1) CB202G-032 089/090, 091/092, 093/094 & 053/054.
- 2) CB202G-031 091/092 & 093/094.
- 3) CB202G-030 021/022 & 023/024.

According to ZPMC records, these joints had root openings in excess of 5mm. ZPMC Personnel were removing the fillet welds in order to change them to CJP weld. This QA Inspector discussed this with ZPMC QC, identified as Zheng Zhi Wei to ensure that the necessary approval / documentation is done before these joints are welded.

#### CB13:

Repair welding of weld joint nos: CB202A-013-002 & 014. Welders are identified as 069896 & 051324. Welding process was identified as SMAW. ZPMC Quality Control (QC) is identified as Zhang Qiao. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-2G(2F)-repair (welding repair report (WRR) no: B-WR12521 Rev-0 & B-WR12522 Rev-0).

Trial Assembly:

CB7, CB8, CB 9 & CB10:

This QA Inspector observed that no significant work was being performed on this CB at the time when this QA was present.

**OBG SEG 8AE:** 

Notification No: 005703.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC QC personnel. This QA Inspector has generated MT report for this date. The member(s) are identified as OBG component – 8AE. The weld designations reviewed are as follows:

1) SSD27-PP63-161 to 167, 176, 123 to 130, 085 to 092, 101, 064 to 068, 057, 059, 062, 017 to 024, 188, 195, 198, 204, 211 & 216.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar,Sailesh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer